I. Listing of the Claims

1. (Original) A device for transcutaneous pressure waveform sensing of an artery, the device having, in use, an application direction towards the skin of a user in the direction of an underlying artery and including:

a pressure sensing head having a distal end; and

at least one skin depressing means substantially adjacent the pressure sensing head and having a distal surface, wherein the pressure sensing head distal end and skin depressing means distal surface(s) are sized such that the pressure sensing head distal end is spaced apart, in the application direction, from the skin depressing means distal surface(s).

2. (Original) The device as claimed in claim 1, wherein the pressure sensing head distal end protrudes from the skin depressing means distal surface(s) in the application direction.

3. (Original) The device as claimed in claim 1, wherein the skin depressing means distal surface(s) protrudes from the pressure sensing head distal end in the application direction.

4. (Previously Presented) The device as claimed in claim 1, wherein the distance between the skin depressing means distal surface and the pressure sensing head distal end is fixed.

5. (Original) The device as claimed in claim 4, wherein distance between the skin depressing means distal surface(s) and the pressure sensing head distal end is approximately 1 .5mm to 2.0mm.

6. (Previously Presented) The device as claimed in claim 1, wherein distance between the skin depressing means distal surface(s) and the pressure sensing head distal end is variable.

7. (Original) The device as claimed in claim 6, wherein the device

includes a handle and the distance between the skin depressing means distal surface(s) and the handle varies relative to the application pressure applied to the user's skin and the distance between the pressure sensing head distal end and the handle is fixed.

8. (Original) The device as claimed in claim 6, wherein the skin depressing means is/are formed from a compressible material.

9. (Original) The device as claimed in claim 6, wherein the device includes a handle and the distance between the pressure sensing head distal end and the handle varies relative to the application pressure applied to the user's skin and distance between the skin depressing means distal surface(s) and the handle is fixed.

10. (Original) The device as claimed in claim 9, wherein the device includes a compression spring arrangement between the pressure sensing head and the handle.

11. (Previously Presented) The device as claimed in claim 1, wherein the device has a single skin depressing means.

12. (Original) The device as claimed in claim 11, wherein the skin depressing means has a substantially annular distal surface.

13. (Previously Presented) The device as claimed in claim 1, wherein the device has a single skin depressing means positioned, in use, on one side of the artery.

14. (Previously Presented) The device as claimed in claim 1, wherein the device has a pair skin depressing means positioned, in use, either side of the artery.

15. (Original) The device as claimed in claim 14, wherein the skin depressing means distal surface(s) are each hemispherical.

16. (Original) The device as claimed in claim 14, wherein the skin depressing means distal surface(s) are each oriented substantially normally to the longitudinal direction of the artery.

17. (Original) A method of transcutaneous pressure waveform sensing of an artery, the method including the steps of:

flattening and depressing at least some of the skin around the and displacing same, in an application direction towards the artery, to a first depth; and

flattening and depressing the skin over the artery and displacing same, in the application direction, to a second depth that differs than the first depth.

18. (Original) The method as claimed in claim 17, wherein the first depth is greater than the second depth.

19. (Original) The method as claimed in claim 17, wherein the second depth is greater than the first depth.

20. (Previously Presented) The method as claimed in claim 17, wherein the distance between the first depth and the second depth is fixed.

21. (Original): The method as claimed in claim 21, wherein the distance between the first depth and the second depth is approximately 1.5mm to 2.0mm.

22. (Previously Presented) The method as claimed in claim 17, wherein the distance between the first depth and the second depth is variable.

23. (Previously Presented) The method as claimed in claim 17, including flattening, depressing and displacing a circular region of the skin over the artery.

24. (Previously Presented) The method as claimed in claim 17, including flattening, depressing and displacing an annular region of the skin

around the artery.

25. (Previously Presented) The method as claimed in claim 17, including flattening, depressing and displacing the skin around the artery on one side of the artery.

26. (Previously Presented) The method as claimed in claim 17, including flattening, depressing and displacing the skin around the artery on both sides of the artery.

27. (Previously Presented) The method as in claimed claim 26, including flattening, depressing and displacing a pair of hemispherical regions of the skin around the artery, the regions being either side of the artery.

28. (Original) The method as claimed in claim 26, including flattening, depressing and displacing a pair of regions of the skin around the artery, the regions being either side of the artery and oriented substantially normally to the longitudinal direction of the artery.

29. (Withdrawn) A target apparatus for use with a device for transcutaneous waveform pressure sensing of an artery, the device having an end with a pressure sensing head protruding therefrom, the apparatus including:

an skin adhesive pad;

a target marking on the pad; and

skin compression means at least partially around the target marking, wherein, during use, the device is applied to the pad with the device pressure sensing head over the target marking and the device end over the skin compression means whereby, when the device is depressed into the skin during use, the skin beneath the target marking and the skin compression means are displaced to differing depths.

30. (Withdrawn) The apparatus of claim 29, wherein the target marking is substantially circular.

31. (Withdrawn and Previously Presented) The apparatus of claim 30, wherein the skin compression means are a pair of substantially rectangular pads either side of the target marking.